

[29th January 1929]

APPENDIX XII.

[Vide answer to question No. 1136 asked by Mr. K. R. Karant at the meeting of the Legislative Council held on the 29th January 1929, page 222 supra.]

Lac cultivation.—Two experiments in lac cultivation on *Shorea talura* were carried out near Devarbetta in North Salem district. Two crops were raised. The first crop—the monsoon crop—took 131 days to mature, and the second—the post-monsoon crop—took 139 days.

The monsoon crop.—Brood lac obtained free from Mysore State was put on trees on the 13th July 1927. Swarming and settlement was mostly complete in about three weeks. Stick lac was removed nearly a month after putting it on the shoots.

About 50 per cent of the insects died within a month during August-September, and the cause of that heavy mortality is not definitely known.

The male emergence which commenced about the middle of September and lasted for a fortnight was satisfactory. About this time numerous predators and parasites chiefly eublema and chalcid fly appeared and caused extensive damage to the crop till its harvest. Very few branches escaped their attack.

The post-monsoon crop.—Forty lb. of healthy brood lac personally selected by me was put on vigorous shoots on the 9th and 10th November 1927. Swarming and settlement progressed rapidly and the stick lac was taken from the trees on the 27th November.

Early growth and male emergence was quite satisfactory. Winged males were also noticed on some branches.

As the weather continued to be favourable the crop developed rapidly in spite of some predators and parasites. But early in March when the crop was almost mature rats started to eat away the thick incrustation and completely destroyed the crop on sixty trees.

The new brood started to swarm out on the 26th March when the crop was harvested. The yield was 160 lb. of cleaned brood lac which was immediately put on the trees at Deverbetta and at Jowlagiri.

A sum of Rs. 9-14-6 was spent in inoculating the trees and in harvesting the crop.

The experiments which were started to study the effects of the climatic conditions of the locality on lac cultivation, and to acquire practical experience of it, have also served as a demonstration of the up-to-date method of cultivating lac successfully for which the Conservator and the District Forest officer were pressing me. They were not conceived on a commercial scale to draw any economic results. However, in spite of the rat damage to a third of the crop the yield was four times the seed used.

Pruning experiments.—It was decided to study the shoot-bearing habits of *Shorea talura* in response to various severities and modes of pruning in different seasons and in different localities to know the best season or seasons when the tree responds most to pruning. Nearly 1,500 poles have been pruned in North and Central Salem divisions and kept under observations.